



# Insulating Oil

#### MAKER TENSION CENTAURO

### **Description**

Light oil of a naphthenic nature specially recommended for use as an insulating fluid in electrical equipment. Pure mineral oil with a highly refined base and very resistant to oxidation, manufactured from treated bases that ensure the absence of solid matter, polar compounds and products that precipitate at low temperatures. Its manufacturing process has an extremely rigorous control, extending to its packaging, in which special precautions are taken to ensure the total absence of humidity, whose presence would be incompatible with the high dielectric power required. It is specially suited for transformers, circuit breakers, rheostats, etc. In general, it can be used in all kinds of electrical devices that need an oil bath acting as a dielectric or cooling agent.

### **Properties**

- High dielectric power and great heat evacuating capacity
- · High oxidation stability
- Insignificant dielectric loss (Tg d)
- Absence of dampness and solids in suspension
- · Minimal formation of sludge during use
- Low aromatic content and totally free of PCBs and PCTs

### Quality levels, approvals and recommendations

- · ASTM D3487 type I
- · BS 148 type II
- EDP Electricity of Portugal\*
- ENDESA Distribution transformers\*
- IBERDROLA Power and distribution transformers\*
- IEC 60296 type B <<STANDARD GRADE>>
- JSHP X\*
- KONčAR D&ST\*
- SIEMENS TUN 901293\*
- TBEA Tebian Electric Apparatus\*
- \*Formal approval

# **Technical specifications**

	UNIT	METHOD	VALUE
Oxidation stability - Dielectric dissipation factor at 90 °C	-	IEC 61125	0.055
Oxidation stability - Total acidity	mg KOH/g	IEC 61125	0.65
Oxidation stability - Total sludge	% in weight	IEC 61125	0.097
Dielectric loss factor at 90 °C	-	IEC 60247	0.00075
Density at 20 °C	g/cm3	DIN 51757-4	0.874
Kinematic viscosity at 40 °C	cSt	ASTM D445	9.8
Kinematic Viscosity at -30 °C	cSt	ASTM D445	940
Flash point, closed cup	°C	ASTM D93	150
Pour point	°C	ASTM D97	-51
Breakdown voltage, untreated	kV	UNE EN 60156	40
Interfacial tension	mN/m	ASTM D971	45

The above mentioned characteristics are typical values and should not be considered product specifications.